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Bulletin

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GUY P. JONES

FADS AND FALLACIES IN NUTRITION.

By M. E. JAFFA, M.S., Chief, Bureau of Foods and Drugs.

There is probably no science which has made greater progress in the last decade than nutrition; but at the same time no science has suffered as has nutrition in the hands of the faddists and those who mark commercial food and vitamin preparations the labels of which savor a repetition of the patent medicine propaganda with which the general public has been so long struggling.

There are so many fads and fallacies in nutrition, that it is somewhat difficult to present even a brief résumé. Among the most prominent, however, may be

mentioned:

(1) The reducing fad.

(2) The bread fad.

(3) The sour milk fad.(4) The vegetarian fad.

(5) The no meat fad.

(6) The vitamin fad.

(7) The bran or roughage fad.

The reducing fad is much more prominent among women than it is among men. It is true that no one wants to be fat, but there are many women who imagine they weigh too much and desire most ardently to reduce. No one should try to reduce without the advice of a competent physician. Serious results often follow

ill-advised dieting. It is a simple matter, by faulty diets—by faddism—to devitalize the tissue, to lose body protein and impoverish the blood stream, but it is a more difficult and slow process to rebuild the body protein, to bring back the "pep," the vitality, so ruthlessly thrown away either through vanity or nutritional fallacies.

It is true that there are cases which are more or less pathological and require special medical treatment, but these are in the minority. In most cases, reduction of weight can be brought about by proper dieting—dieting which will include the important and protective foods, afford variety, and every way tend to maintain health, activity and ability to work, but at the same time accomplish the purpose intended—the lessening of the weight of the body.

Dr. Fishbein, in his valuable and timely book entitled "The New Medical Follies," truly says that "The relationship of undernutrition to anemia, tuberculosis and other wasting diseases is as certainly established as any factor in medicine." If those who contemplate reducing without competent advice would remember this pertinent warning, they would hesitate in no small degree before they started downhill nutritionally, in that undernutrition would be the fundamental

or ultimate result of continued use of illadvised reducers.

Too much time and attention are devoted to, and far too much money spent for, alleged cures. Many of them are, according to the American Medical Association, more nearly akin to "fat fakes" than "fat cures."

As the Journal of the American Medical Association states, the first obesity cures, and these are still in the majority, came in pill or tablet form; then there were "reducing creams" to be rubbed on the surface of the body; "reducing soaps" which were said to wash away the fat; "salts" to put in the bath, sold under the claim that they would melt this too, too solid flesh; and finally chewing gums whose use was said to change in short order a stylish stout to a svelte-like lissomeness.

Among the more widely advertised "obesity cures" of the chewing gum type were "Silph," "Slends" and "Elfin," and because of the inquiries received about these humbugs it was decided to analyze the products so that the medical profession and the public might be given the facts. Hardly had work started on these nostrums when the government, through the Post Office Department, issued a fraud order against the concern that put out "Silph Reducing Gum," and the results of the government's work were given in detail in the Journal of August 28, 1926. It will be remembered that Silph Chewing Gum contained thyroid, phytolacca, bladderwrack, leptandrin, pepsin and pancreatin.

Sewage Disposal Applications Pending.

The following applications for sewage disposal permits are pending before the State Board of Public Health, final action to be taken at the next regular meeting of the board, January 14, 1928:

SAN BERNARDINO—To construct Imhoff tank and sprinkling filters at West Ranch, with disposal into Warm Creek.

JULIAN—Application from the Board of Supervisors of San Diego County for permit to construct a sprinkling filter plant for the unincorporated town of Julian, with outlet into Coleman Creek.

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There is not an hour of life but is trembling with destinies—not a moment of which, once past, the appointed work can ever be done again, or the neglected blow struck on the cold iron.—Ruskin.

White Bread Versus Graham Bread.

There seems to be considerable misunderstanding concerning the real value of graham bread, whole wheat bread and bran products, in the human diet. There are many who consider it advisable, and desirable, under present conditions, to use these products as much as possible.

If the arguments of such advocates were followed to a logical conclusion, all wheat should be ground into graham flour. The definition under the national and pure food laws is as follows:

"Graham flour is unbolted wheat meal."

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Under such conditions there would be no bran, no shorts, on the market.

There are two questions involved:

- 1. Would such condition of affairs be advisable?
- 2. Is graham bread better utilized by the human system than bread made from patent or bakers' flour?

If the coefficients of availability for man were the same, or very nearly so, for the nutritive ingredients of graham bread and white bread there would be no room for argument, but such is not the fact.

1. The coefficients of availability of protein and carbohydrates in graham bread are far less than they are for bread made from patent flour, and similarity with reference to other grains.

2. There are many whose systems can not stand continued use of graham flour and other whole-grain meal, corn, milo maize, etc.

3. The main cause for the lowering of the coefficients of digestibility or availability is due to the presence of bran in graham flour.

4. The coefficients of digestibility for protein for bran in the case of man are about 40 per cent when finely ground, and for the other nutrients, about 58 per cent.

5. What is not rendered available to man is absolutely lost. In the case of the cow, on the other hand, it is entirely different because:

- a. The coefficients of availability of protein in bran are nearly 80 per cent. Similarly with reference to the available carbohydrates.
- b. Bran and shorts are among the most desirable concentrates for the cow and poultry.

c. The manure resulting from feeding bran contains valuable minerals, the cost of which, when bought in fertilizers, is great.

d. The returns from feeding of bran to the cow are threefold:

In milk. In manure. In meat.

The arguments in favor of the use of bran products and graham bread are:

- 1. Increasing peristaltic action in the intestines.
- 2. The presence of valuable minerals.
- 3. The presence of vitamins, or food accessories.

The answers to these are:

- 1. That if one follows out the rules and regulations governing the selection of a proper diet there would be plenty of roughage due to the generous use of fruits and vegetables and also in the breakfast foods or mushes.
- 2. The minerals which are contained in these wheat by-products are also found in milk, meat, eggs, fruit and vegetables. Furthermore, milk is the most valuable source of lime while the cereals are lacking in this most important mineral element.
- 3. The food accessories or vitamins which are essential in the diet of the old or young, the sick or the well, are not present to any extent in bran according to the latest investigations. It is true that bran does contain a small amount of vitamin B but the main content of vitamin B in wheat is in the germ or embryo. If the diet includes, as it should, meat, milk, eggs, fresh vegetables and fruits the vitamins will be furnished in ample quantities, and in their best form.

It would therefore appear that the arguments of those advocating the use of graham bread are completely refuted.

In Europe the use of coarse flours is not recommended. They have been tried out with very poor results, in that digestive disturbances follow. This was the case in Belgium, England and Germany, and the conclusions have been arrived at after years of experience and sacrifice, that in order to insure the best conditions, dietetically, the white flour is the most satisfactory, and it is not safe to use a flour for bread-making which comprises more than 82½ per cent of the entire

wheat grain. This 82½ per cent includes 5 per cent moisture.

Much more could be said with reference to this matter, and what has been said of wheat is true of other grains. When bread or wheat products are to be made, use should be made of the bolted flours from every grain, and save for the cow and poultry and swine, the byproducts. By such a method of procedure the most efficient results will follow. Less digestive disturbances will result in the case of man, and better utilization of the by-products will result when these are fed to the cattle and poultry.

It is true that graham bread and bran products have a therapeutic or medicinal value in cases of constipation or sluggish intestines, but in that case they rank as medicines or tonics. Again it is also a fact that in the bran and in the graham bread there are minerals which are not contained to the same extent in the refined flour. Particularly is this true of the phosphates and if the grains were to be the sole source of nourishment, then by all means the graham bread and bran products should be eaten but the case is entirely different when the normal varied diet is partaken of.

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In the last fifty years diseases which formerly caused a tremendous toll in human misery and deaths have been brought under subjugation. In the last one hundred years the average life space of humans in the western world has been marvelously increased. That increased number of years in which to live and to serve in the world largely has come about through scientific research devoted to the study and elaboration of newly discovered and applied scientific facts in relation to the human body and its functions.

What a sad reflection on the type of modern-day intelligence and culture that so many lay fellows, through philosophical contemplations associated with emotional and unstable mental functioning, let their vision of these actual accomplishments of scientific medicine in recent years in the conservation of human health, life and happiness become so warped that they are unable to appreciate what that scientific progress has meant to the prosperity and happiness of the human beings and living things in this world in which we of today have our earthly existence.

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"Good health should be sought, not only because it aids in the prevention of disease, but also because better health is desirable for its own sake. Good health is one of the fundamentals—probably the most important one—responsible for the well-being, the comfort, happiness, and material prosperity of our people. We all know that sickness is expensive. There is not only the direct cost, as represented by doctors, nursing and hospital fees, and the cost of supplies; but indirectly there is waste of time and loss of strength and efficiency, all of which add materially to the cost of illness.—Dr. Henry Albert, State Health Commissioner of Iowa.

MORBIDITY.*

Diphtheria.

114 cases of diphtheria have been reported, as follows: Berkeley 5, Oakland 23, Butte County 1, Burbank 1, Hermosa Beach 1, Long Beach 1, Los Angeles 39, San Fernando 3, Whittier 1, South Gate 1, Napa 2, Merced 1, Orange County 1, Huntington Beach 1, Santa Ana 5, Sacramento County 2, Hollister 1, Ontario 1, San Bernardino 3, San Diego County 2, La Mesa 1, National City 1, San Diego 6, Stockton 3, Santa Clara County 1, Palo Alto 1, Exeter 1, Marysville 5.

Scarlet Fever.

132 cases of scarlet fever have been reported, as follows: Alameda 3, Berkeley 3, Oakland 20, Butte County 5, Calexico 1, Los Angeles County 8, Alhambra 1, Compton 1, Long Beach 6, Los Angeles 32, San Gabriel 1, Monterev Park 5, Maywood 3, Madera 1, Nevada County 1, Orange County 1, Orange 2, Sacramento County 1, Sacramento 8, San Diego 9, San Joaquin County 1, Stockton 3, Redwood City 2, Santa Clara County 3, San Jose 4, Healdsburg 1, Vacaville 4, Stanislaus County 1, Lindsay 1.

Measles.

17 cases of measles have been reported, as follows: Walnut Creek 2, Los Angeles County 1, Burbank 1, Los Angeles 3, Merced 1,

* From reports received on December 26th and 27th for week ending December 24th.

Sacramento 1, San Diego County 2, Ocean. side 1, San Diego 2, Paso Robles 1, San Luis Obispo 2.

Smallpox.

11 cases of smallpox have been reported, as follows: Hayward 2, Oakland 1, Butte County 5, Sacramento 1, Santa Clara County 1, California 1.

Typhoid Fever.

10 cases of typhoid fever have been reported, as follows: Butte County 1, Los Angeles County 1, Huntington Park 2, Los Angeles 2, Merced County 1, San Joaquin County 2, California 1.

Whooping Cough.

39 cases of whooping cough have been reported, as follows: Los Angeles County 3, Compton 3, Long Beach 2, Los Angeles 12, Monterey Park 1, Fullerton 3, Santa Ana 2, Seal Beach 1, Tustin 5, San Diego County 1, San Diego 3, San Joaquin County 1, San Jose 2,

Poliomyelitis.

7 cases of poliomyelitis have been reported, as follows: Butte County 1, Calaveras County 1, Fresno County 1, Willows 1, Bakersfield 1, Los Angeles 1, San Joaquin County 1.

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Food Poisoning.

Los Angeles reported 5 cases of food poisoning.

COMMUNICABLE DISEASE REPORTS.

Disease	1927				1926			
	Week ending			Reports for week ending	Week ending			Reports for week ending
	Dec. 3	Dec. 10	Dec. 17	Dec. 24 received by Dec. 27	Dec. 4	Dec. 11	Dec. 18	Dec. 25 received by Dec. 28
Anthrax.	1	0	0	0	0	0	0	0
Botulism	0	0	0	0	0	0	0	0
Chickenpox	283	410	248 162	26 114	408 195	477 173	259 184	160 99
Diphtheria (Pacillary)	148	136	102	114	193	1/3	184	99
Dysentery (Bacillary) Encephalitis (Epidemic) _	2	2	Ö	ō	4	1	0	1
Food Poisoning	ő	ő	ŏ	5	Ō	ō	ŏ	0
Gonococcus Infection	119	103	110	53	99	109	79	33
Influenza	32	21	28	53 13	22	34	25	11
Jaundice (Epidemic)	Õ	3	ō	0	3	2	0	0
Leprosy	ĭ	Ö	0	0	Ö	1	Ö	1
Malaria	Ō	0	0	0	1	3	Ö	0
Measles	38	55	51	17	854	1051	873	460
Meningitis (Epidemic)	2	6	2	0	2	1	1	2
Mumps	81	95	92	41	181	224	137	49
Paratyphoid Fever	0	0	0	1	0	0	0	0
Pneumonia (Lobar)	40	46	57	34	81	51	51	41
Poliomyelitis	14	27	25	7	5	7	3	0
Rabies (Animal)	13	5	13	3	4	8	6	0
Rocky Mt. Spotted Fever	0	0	0	0	0	0	0	0
Scarlet Fever	172	173	191	132	233	236	274	138
Smallpox	12	100	27	11	40	15	4	38
Syphilis	121	123	204	67	154	146	101	0
Tetanus	2 3	3 7	0	0	104	0	0	4
Trachoma			0	1	194	9	87	0
Trichinosis	100	215	179	0 85	202	0 141	152	60
Tuberculosis	188	11	7	10	12	13	16	15
Typhoid Fever	ő	0	ó	0	0	0	0	0
Typhus FeverWhooping Cough	125	170	83	39	70	71	41	41
Totals	1401	1619	1479	660	2766	2722	2294	1163